

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(s): Hourunranta A.

SERIAL NO.:

ART UNIT:

FILING DATE: Herewith

EXAMINER:

TITLE: ERROR DETECTION IN LOW BIT-RATE VIDEO  
TRANSMISSION

ATTORNEY

DOCKET NO.: 442-008985-US (C01)

Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT  
(37 C.F.R. §1.97(b))

Sir:

The following information is being disclosed to the Patent and Trademark Office as information that may be material to the examination of the above-identified patent application. Applicants' Attorney is aware of the following patents:

5,517,327

5,535,013

5,598,514

5,621,467

5,703,889

5,745,169

EP 0 999 709 A2

FI 97495

WO 95/03674

An Error Concealment Algorithm for Images Subject to  
Channel Errors

Error Resilient Video Decoding

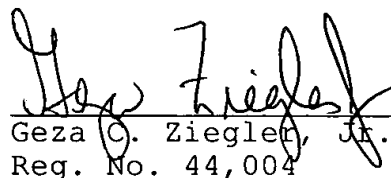
An Error Concealment Technique In the Spatial Frequency Domain  
Error Resilient Decoding of Randomly Impaired MPG-2 bit Stream  
A Statistical Error Detection Technique for Low bit-Rate Video  
A Method for Robust Decoding of Erroneous MPG-2 Video Bitstreams  
Error Detection and Correction of Vector Quantised Digital Images

Enclosed is a form PTO-1449 listing the art cited in the parent patent application No. 09/433,490. In accordance with 37 C.F.R. 1.98(d) copies of the cited art are not enclosed. These can be obtained from the file of the parent patent application.

The filing of this Statement is not to be construed as a representation that a search has been made regarding the claimed invention (37 C.F.R. §1.97(g)) or that no other possible material information exists. In addition, the filing of this Information Disclosure Statement is not to be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability (37 C.F.R. §1.97(h)).

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,

  
\_\_\_\_\_  
Geza C. Ziegler, Jr.  
Reg. No. 44,004

28 OCTOBER 2003  
Date

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<b>INFORMATION DISCLOSURE CITATION FORM FOR PATENT APPLICATION (FORM PTO-1449) (Substitute)</b>			Docket No.: 442-008985-US (C01)		Serial No.:	
			Applicant(s): Hourunranta, A.			
			Filing Date: Herewith		Group:	
<b>U.S. PATENTS</b>						
Initials	Patent Number	Issue Date	Name	Class	Sub-class	Filing date
	5,517,327	5/14/96	Nakatani et al.	358	462	6/28/94
	5,535,013	7/9/96	Murata	358	432	9/21/94
	5,598,514	1/28/97	Purcell et al.	395	118	8/9/03
	5,621,467	4/15/97	Chien et al.	348	409	2/16/95
	5,703,889	12/30/97	Shimoda et al.	371	55	12/14/94
	5,745,169	4/28/98	Murphy et al.	348	192	7/19/94
<b>U.S. PATENT PUBLICATIONS</b>						
Initials	Publication No.	Pub. Date	Name	Class	Sub-class	Filing Date
<b>FOREIGN PATENT DOCUMENTS</b>						
Initials	Document Number	Date	Country	Name		Translation? Yes/No/n/a
	EP0999709A2	10/14/99	European			
	FI 97495	9/13/96	Finland			
	WO 95/03674	2/2/95	PCT			
<b>OTHER DOCUMENTS (Title, Author, Date, Pages, Etc., if known)</b>						
	"An Error Concealment Algorithm for Images Subject to Channel Errors", Lam et al., IEEE Transactions on Image Processing, Vol. 4, No. 5, May 1995, pp. 533-542					
	"Error Resilient Video Decoding", Hietala Aki, Master of Science Thesis, Oulu University, Department of Electrical Techniques, 1997, (English translation of the Abstract)					
	"An Error Concealment Technique in the Spatial Frequency Domain", Pickering et al., Signal Processing, No. 54, Elsevier 1996, pp. 185-189					
	"{Error Resilient Decoding of Randomly Impaired MPEG-2 bit Stream" Kim, Visual Communications and Image Processing '96, vol. 2727, pages 78-88.					
	"A statistical Error Detection Technique for Low Bit-Rate Video", Pickering et al., 1997 IEEE Tencon-Speech and Image Technologies for Computing and Telecommunications, pages 773-776.					
	"A Method for Robust Decoding of Erroneous MPEG-2 Video Bitstreams", Keck, IEEE Transactions on Consumer Electronics, 1996, vol. 42, No. 3, pages 411-421.					
	"Error Detection and Correction of Vector Quantised Digital Images", Chua et al., IEE Proceedings – I, 1990, vol. 137, pages 417-423.					
Examiner's Signature:				Date Considered:		
Initial if reference was considered, whether or not citation is in conformance with MPEP. Mark through citation if not considered. Include a copy of this citation form with your next correspondence to the Applicant(s).						